



1612

**PENTAGRID AMPLIFIER***For applications critical as to microphonics*

|                                                  |                             |                  |
|--------------------------------------------------|-----------------------------|------------------|
| Heater                                           | Coated Unipotential Cathode |                  |
| Voltage                                          | 6.3                         | a-c or d-c volts |
| Current                                          | 0.3                         | amp.             |
| Direct Interelectrode Capacitances: <sup>o</sup> |                             |                  |
| Grid #1 to Grid #3                               | 0.20 max.                   | μf               |
| Grid #1 to Plate                                 | 0.001 max.                  | μf               |
| Grid #3 to Plate                                 | 0.10 max.                   | μf               |
| Grid #1 to All Other Electrodes                  | 7.5                         | μf               |
| Grid #3 to All Other Electrodes                  | 10                          | μf               |
| Plate to All Other Electrodes                    | 11                          | μf               |
| Maximum Overall Length                           | 3-1/8"                      |                  |
| Maximum Seated Height                            | 2-9/16"                     |                  |
| Maximum Diameter                                 | 1-5/16"                     |                  |
| Bulb                                             | Metal Shell, MT-8           |                  |
| Cap                                              | Miniature                   |                  |
| Base                                             | Small Wafer Octal 7-Pin     |                  |
| Pin 1 - Shell                                    | Pin 5 - Grid #3             |                  |
| Pin 2 - Heater                                   | Pin 7 - Heater              |                  |
| Pin 3 - Plate                                    | Pin 8 - Cathode             |                  |
| Pin 4 - Grids #2 & #4                            | Cap - Grid #1               |                  |
| Mounting Position                                | Any                         |                  |



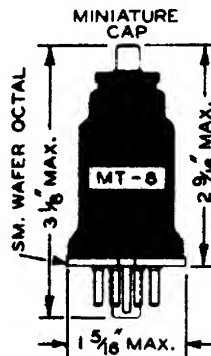
BOTTOM VIEW

*Maximum Ratings Are Design-Center Values***AMPLIFIER**

|                                                                               |           |        |
|-------------------------------------------------------------------------------|-----------|--------|
| Plate Voltage                                                                 | 250 max.  | volts  |
| Screen Voltage                                                                | 100 max.  | volts  |
| Plate Dissipation                                                             | 1.5 max.  | watts  |
| Screen Dissipation                                                            | 1.0 max.  | watt   |
| <i>Typical Operation and Characteristics - Class A<sub>1</sub> Amplifier:</i> |           |        |
| Plate                                                                         | 250       | volts  |
| Screen (Grids #2 & #4)                                                        | 100       | volts  |
| Control Grid (Grid #1)                                                        | -3        | volts  |
| Control Grid (Grid #3)                                                        | -3        | volts  |
| Plate Res.                                                                    | 0.6       | megohm |
| Transcond. (Grid #1 - Plate)                                                  | 1100      | μmhos  |
| Transcond. (Grid #1 - Plate)*                                                 | 5 approx. | μmhos  |
| Plate Cur.                                                                    | 5.3       | ma.    |
| Screen Cur.                                                                   | 6.5       | ma.    |

- In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.
- With shell connected to cathode.
- \* With Grid #1 bias = -15 volts; Grid #3 bias = -15 volts.

Curves under type 6L7 also apply to the 1612.



← Indicates a change.

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DATA